



ECS  
COLLABORATION  
TOOL

# Artech Material Passport

Digital Product Passport (DPP)

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# Artech International

- Artech International; a Brussel based SME expert in advanced technology and extensive European network reach. Specializing in transforming early-stage technological ideas into fully implemented projects having a strong track record, recognized by European industries and organizations.
- Finalized & ongoing National, EIT Urban Mobility, Horizon Europe, KDT RIA projects.
- Interested in participating in Global RIA calls;
  - HORIZON- Chips 2024-2-RIA-T1
  - HORIZON- Chips 2024-2-RIA-T2
  - HORIZON- Chips 2024-3-RIA

# Digital Product Passport - DPP

- DPP is a strategic initiative to ensure products, specifically in the semiconductor and electronics sectors, maintain a transparent, sustainable, and traceable lifecycle. By incorporating DPP, we aim to align with the Chip Act's objectives, enhancing the semiconductor industry's resilience and competitiveness through sustainable and ethical manufacturing practices.
- **Enhanced Transparency:> Material & Process Disclosure:** DPP provides in-depth visibility (Data-as-a-Service) into the materials and processes used in chip manufacturing, promoting environmental responsibility.
- **Sustainability & Ethical Manufacturing:> Environmental Impact:** DPP emphasizes reducing the carbon footprint and optimizing recycling efforts, directly supporting the Chip Act's sustainability goals using Large Knowledge Models in Industrial Applications
- **Regulatory Compliance & Industry Standards:> Adherence to Regulations:** Through DPP, companies can demonstrate compliance with the Chip Act by ensuring their supply chains and manufacturing processes meet the specified standards for sustainability and ethical practices using risk mitigation.

# Regulatory Compliance & Sustainability

- **Regulatory Alignment:** DPP aligns with the Chip Act by detailing product lifecycles from sourcing to disposal, ensuring compliance but also serves as a robust risk mitigation strategy.
- **Sustainability Focus:** DPP helps companies track and lessen their environmental footprint, supporting the Chip Act's sustainability goals using near real time analytics.
- **Innovation and Competitiveness:** DPP boosts global market competitiveness, encouraging innovation with a commitment to sustainability and ethics.
- By providing sector-specific action lists, our services empower each stakeholder with a customized roadmap for compliance, ensuring a proactive and strategic approach to addressing regulatory challenges within their unique operational contexts

# AI-Empowered DPP Platform




- **Cloud-Native Design:** Offers a scalable, adaptable, and secure infrastructure.
- **Real-Time Insights:** Enhanced with AI for continuous monitoring, providing instant ESGE data analysis.
- **Customization and User Experience:** Features customizable modules and a user-friendly interface for easy access to sustainability performance and benchmarks.
- **Implementation Strategies:**
  - **DPP as Core Framework:** Ensures consistent data management and interoperability across sectors.
  - **Standardization and Privacy:** Advocates for standardized data exchange protocols and privacy-preserving technologies, aligning with sustainability goals.
  - **Future-Proof Compliance:** Emphasizes scalable solutions, proactive stakeholder engagement, and alignment with regulatory changes, including the Chip Act for electronic components.

# Future Directions & Collaboration




- **Stakeholder Engagement:** Foster a collaborative ecosystem with key players in the manufacturing sectors to drive innovation and sustainability. This innovative solution seamlessly integrates the Environmental, Social, Governance, and Economic (ESGE) modules, offering a comprehensive and dynamic approach to supply chain monitoring and sustainability assessment.
- **Adaptation to Standards:** Commit to the continuous adaptation of our platform and practices to meet the latest data privacy, safety, and environmental regulations.
- **Sustainable Industry Leadership:** Leverage sustainable practices to spearhead industry innovation, set new & adapt standards, and secure a competitive edge in the global market.

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